Anticonvulsants, Serotonin–Norepinephrine Reuptake Inhibitors, and Topical Analgesics for Neuropathic Pain

Key Questions and Inclusion Criteria

Update #1

Key Questions

- 1. What is the comparative effectiveness of anticonvulsants, serotonin–norepinephrine reuptake inhibitors (SNRIs), and topical analgesics for neuropathic pain?
- 2. What are the comparative harms of anticonvulsants, SNRIs, and topical analgesics for neuropathic pain?
- 3. Are there differences in effectiveness or harms of anticonvulsants, SNRIs, and topical analgesics based on demographics, socioeconomic status, co-morbidities, or drugdrug interactions, when used to treat neuropathic pain?

Inclusion Criteria

Populations

Adults with neuropathic pain, including:

- · Painful diabetic neuropathy
- Post herpetic neuralgia
- · Trigeminal neuralgia
- Cancer related neuropathic pain
- HIV related neuropathic pain
- Central/post-stroke neuropathic pain
- Neuropathy associated with low back pain
- Peripheral nerve injury pain
- Phantom limb pain
- · Guillain-Barre syndrome
- Polyneuropathy
- · Spinal cord injury related pain
- Complex Regional Pain Syndrome (also known as Reflex Sympathetic Dystrophy)

Interventions

Anticonvulsants:

Gabapentin (Neurontin)

Pregabalin (Lyrica)

Carbamazepine (Tegretol, Carbatrol, Epitol*)

Topiramate (Topamax)

Oxcarbazepine (Trileptal)

Lamotrigine (Lamictal)

Valproic acid/divalproex (Depacon, Depakene*/Depakote, Epival*)

Comment [SC1]: All types of CRPS may be considered neuropathic pain

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Tricyclic antidepressants:

Amitriptyline (Elavil, Vanatrip)

Desipramine (Norpramin)

Nortriptyline (Pamelor, Aventyl)

Imipramine (Tofranil)

Doxepin (Sinequan, Zonalon)

SNRIs:

Duloxetine (Cymbalta) Venlafaxine (Effexor)

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Citalopram (Celexa)

Fluoxetine (Prozac)

Paroxetine (Paxil)

Sertraline (Zoloft)

Escitalopram (Lexapro, Cipralex*)

Topical analgesics:

Lidocaine transdermal patch (Lidoderm)

Capsaicin topical patch (Qutenza)

NMDA receptor antagonist:

Dextromethorphan

Effectiveness outcomes

- Response (including patient reported pain relief, patient reported global impression of clinical change, any other pain related measure)
- Use of rescue analgesics
- Functional capacity (quality of life, work productivity)
- Speed and duration of response
- Relapse

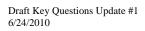
<u>Harms</u>

- Overall adverse effects
- Withdrawals
- · Withdrawals due to adverse effects
- Serious adverse events (including mortality, arrhythmias, seizures, overdose)
- Specific adverse events or withdrawals due to specific adverse events (including, but not limited to, hepatic, renal, hematologic, dermatologic, sedation/drowsiness, and other neurologic side effects)

Study designs

1. For effectiveness, controlled clinical trials, good or fair quality systematic reviews, long-term comparative observational studies.

Comment [SC2]: Consider removing one or both of these?



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2. For harms, in addition to controlled trials and systematic reviews, observational